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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/488,129	01/20/2000	Patrick W. Mullen	1571.1144001	3992
21005	7590	10/12/2004	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			CHEVALIER, ALICIA ANN	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/488,129

Applicant(s)

MULLEN ET AL.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 11-15, 18, 22-27 and 29-49 is/are pending in the application.
- 4a) Of the above claim(s) 34-43 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 11-15, 18, 22-27, 29-31 and 49 is/are allowed.
- 6) ☒ Claim(s) 32, 44 and 46-48 is/are rejected.
- 7) ☒ Claim(s) 33 and 45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

RESPONSE TO AMENDMENT

1. Claims 1-6, 11-15, 22-27 and 29-49 are pending in the application, claims 34-43 are withdrawn from consideration. Claims 7-10, 16, 17 and 19-21 have been cancelled.
2. Amendments to the claims, filed on August 18, 2004, have been entered in the above-identified application.

REJECTIONS

3. The 35 U.S.C. §103 rejection of claims 32, 44 and 46-48 as over Benson et al. (US Patent No. 6,287,670) in view of Martin et al. (U.S. Patent No. 5,786,066) is repeated for reasons previously made of record in the office action mailed May 18, 2004, pages 3-6, paragraph #7.

Allowable Subject Matter

4. Claims 1-6, 11-15, 18, 22-27, 29-31 and 49 allowed, having claims 1 and 25 as base claims.
5. Claims 33 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments in the response filed August 18, 2004 regarding the 35 U.S.C. 103 rejection over Benson in view of Martin of record have been carefully considered but are deemed unpersuasive.

Applicant argues that Martin does not teach chips with each chip length less than about 457 micrometers. Then Applicant points out that although the height of the prisms is about 449 micrometers, the length along the window side of each prism is about 898 micrometers.

The Examiner does not understand how or where Applicant found the height of the prisms to be 449 micrometers and the lengths along the "window" side to be 898 micrometers. The only height the Examiner is able to find in the reference is in column 2, lines 49-50, where it recites microprisms 14, about 2.8 mils high, which is equivalent to 71 micrometers in height. Furthermore, Applicant merely repeats what the examiner pointed out reference that Martin discloses at column 3, lines 36-37 that individual retroreflective prism have side dimensions of less than about 0.025 inches (635 micrometers), but does not explain why this section does not teach Applicant's claimed limitation chip length less than about 457 micrometers. Applicant's arguments fail to specifically point out how the reference fails to meet the claimed limitation.

Applicant further argues that the Examiner is improperly combining the teachings of Benson and Martin because Benson discloses an open-faced sheeting while Martin discloses a traditional cub-corner prism.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching,

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suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Martin discloses that retroreflective sheet/array can be cut into thousands of very small individual retroreflective prisms and mixed with paint or transparent binder and applied as a decorative retroreflective coating (*Martin col. 3, lines 36-44*). Irregardless of whether the retroreflective prisms are open-faced or traditional, Martin still discloses that individual retroreflective prisms are useful in paint or binders to create decorative retroreflective coatings. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to make Benson's retroreflective sheeting into individual retroreflective chips with a length of less than about 457 micrometers as taught by Martin in order allow the retroreflective sheeting to be mixed with a matrix. One of ordinary skill in the art would have been motivated to make Benson's retroreflective sheeting into small chips because it would allow the chips to be mixed with paint or a transparent binder and applied as a decorative retroreflective coating to a suitable substrate, such as, fabrics, wood, plastic or metal panels, or the like (*col. 3, lines 37-40*).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac

10/5/04


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

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